

also grows with these, but does not live in the *mud*, but escapes this by growing in the fissures of the cypress trees, a prisoner for life, by choice.

Thus far my researches have been productive of one new species, *U. friersoni* Wright, and the extending of habitat of three shells. But I hope to accomplish much more in the future, which, if successful, will be given to the readers of THE NAUTILUS.

Frierson Mill, De Soto Parrish, Louisiana.

CONTRIBUTION TO A KNOWLEDGE OF UNITED STATES UNIONIDÆ.

BY S. HART WRIGHT.

(*Concluded.*)

Unio Swordianus sp. nov.

Shell oval, massive, very inequilateral, rounded before, highly arched above and rounded at base, very bluntly pointed behind. Sides flattish, constricted slightly or not at all, and the umbonal ridge usually obsolete. Epidermis brownish or somewhat horn-colored, rayless, and the surface roughened with close growth-lines. Ligament darkened, heavy, short and much elevated. Beaks pointed, small and very low. Beak cavity shallow, extending slightly under both cardinal and lateral teeth, thus making it very broad and with obtusely rounded sides. Cardinal teeth double in the left valve, single in the right and smoothish, or crested and short. Lateral teeth heavy, slightly curved, wide apart, arising from a thick dorsal plate. The cardinal of right valve with an oblong groove at its base. Cicatrices distinct; dorsal cicatrices confluent into an oblong groove under the dorsum. Pallial impression deep and denticulate. Nacre usually pure white, often more or less with waxy discolorations or mottlings or even dirty white. Width 4 inches, length 2, diameter $1\frac{5}{8}$.

Habitat: Powell's Creek, Lee Co., Va.

Remarks: Affinity, *U. bursapastoris* B. H. Wright and *U. abacus* Hald. Our shell differs from the first in having a lighter epidermis, an arched dorsum, shell cavity greater, beak cavity very much less, being nearly extinct, and the posterior dorsal area narrower and very abrupt in its descent. From *U. abacus* it differs in the beak cavity, and is much more inequilateral. Ten specimens were obtained from the collector, Mr. T. F. Sword, for whom it is named.

Unio Diazensis sp. nov.

Shell small, oval, thin, bluntly or truncately pointed behind, and biangulated there; rounded obliquely in front, the curve meeting the dorsal line with a distinct angle. Epidermis reddish-brown, lighter above on the first growth, finely and obscurely striate with minute scales, more apparent near the base. Lines of growth distant, about two. Rays nearly obsolete, or, if present, seen faintly on the anterior end, or on the first growth. Umbonal ridge well-defined, rather narrow. Posterior slope rather *broad* and raised into a keel. Dorsal line nearly straight. Umbos small, broad and not raised. Beaks with a double series of granular undulations. Dorsal plate thin. Shell cavity rather deep and broad. Beak cavities slight. Cardinal teeth very small and light, more or less compressed. Lateral teeth very narrow, *slim* and nearly straight. Anterior cicatrices distinct; posterior confluent. Cardinal of right valve single. Dorsal scars under the plate. Nacre salmon or copery. Width $1\frac{1}{2}$ inches, length $\frac{7}{8}$, diameter $\frac{1}{2}$.

Habitat: Lake Diaz, Volusia Co., Florida.

Remarks: In 1887 we gathered about 2,000 of these little thin shells in Lake Diaz, no other *Unio* being found in that lake, except *U. amygdalum* Lea. They were always in white sand, with clear and rather shallow water, and nearly all of one size. Affinity, *U. fuscatus* Lea, from which our shell differs in being smaller, less transverse, more inflated, having a much higher umbonal ridge well marked, while in *U. fuscatus* the ridge is nearly or quite obsolete. From *U. coruscus* Gould the Diaz shell differs in having always *thin* lateral teeth, a *thin* dorsum and smaller cardinals and a high keel, and is always a thinner shell. It differs from *U. fryanus* B. H. Wright in being much less polished, lighter, less solid, fewer rayed, greater umbonal ridge and more attenuated in front. In a "Check List of N. A. Unionidæ," published in 1888, a species of *Unio* was listed as "*U. diasensis*," but was never published, and therefore does not preoccupy the *similar* name now given above.

Note.—Types of all the above species will be sent to the National Museum and duplicates of the types to the Academy of Natural Sciences of Philadelphia.

ERRATA.—In THE NAUTILUS, X, No. 12, page 136, first line, for "triangular, clavate," read "triangular-clavate." Eighth line, for "narrower," read "narrow." Page 137, ninth line above the bottom, for "groove in the," read "groove under the."